INTRODUCTION/OBJECTIVES: Olfactory malfunction is one of the first non-motor signs of Parkinson’s disease (PD). This dysfunction occurs in about 90% of early-stage PD cases and can precede the onset of motor symptoms by years. The mechanisms responsible for olfactory dysfunction are presently unknown, but we can diagnose this condition prematurely through olfactometry. Our review’s purpose is to highlight the importance of this test for the elderly patients, after 65 years old, or for patients with risk factors such as genetics or environmental factors, a decreased level of dopamine or the presence of Lewy bodies in the brain.

MATERIALS AND METHODS: Various papers were analyzed, using the PubMed database, and studies which focused on this particular test and Parkinson in general.

RESULTS: A quantitative assessment of olfactory function was conducted using the T and T olfactometer assays. This test includes five types of odors at different concentrations. Odor deficiency is a feature of PD. Recent evidence suggests that over 90% of PD patients are diagnosed with significant olfactory loss. Olfactory loss in DP has a bilateral and general character and all olfactory fields are concerned. Clinical tests are available to quickly characterize olfactory dysfunction, including odor testing. Olfactory tests may establish hyposmia by identifying odors, assessing, discriminating and the odor detection threshold. Considerable efforts are being made to develop preventative or disease-modifying therapies that slow or halt the progression of PD.

CONCLUSION: Since it is essential to diagnose PD as early as possible, we believe olfactory tests could be the key to detection, prognosis and diagnosis.